PCB INSPECTION REPORT

Armco Steel
7000 Roberts and
2100 Manchester
Kansas City, Missouri 64125
816/242-5506

May 11 and 12, 1982

Docket Number 7-82-T-17

INTRODUCTION

This facility was selected for inspection by administrative neutral base scheme. The inspection was to determine if the firm was in compliance with current PCB regulations.

SUMMARY OF FINDINGS

Possible deviations from the PCB rules included the lack of an ML mark to mark the PCB storage for disposal area, the use of a four-inch ML to mark PCB capacitors in use and stored for use and PCB storage areas in 100-year floodplain. Possible deviations from the RCRA rules included unmarked drums of hazardous waste, open drums of strong alkaline material stored out of doors, direct burial of baghouse dust and placement of acid waste in city sewage treatment facility.

HISTORY OF BUSINESS

Mr. Kelly said the Kansas City plant started in the 1880's. It is situated on about 1200 acres and is enclosed by chain link fence and barbed wire, except for some waterfront areas. There are two operating divisions, Armco Midwestern Steel Division makes raw steel and ten finished products such as nuts, bolts, nails, angles, flats, grinding balls, tracks, spikes, etc. The other operates under the name of Union Wire Rope and produces cable. The firm has its own security department, and they maintain 24-hour surveillance at all plant entrances. There are normally about 4300 employees, but due to the current economic situation, the workforce is down to about 3000. They operate three shifts a day.

PERSONS INTERVIEWED AND INDIVIDUAL RESPONSIBILITIES

On May 11, 1982, CSO Ruben B. McCullers and I presented our credentials to Rodney L. Kelley, Industrial Hygiene Engineer. Mr. Kelley said he would accompany us during the inspection, provide PCB records and answer questions, but he didn't have the authority to sign our notice of inspection and confidentiality notice. He called his supervisor, Berl T. Ellis, Superintendent of Accident Prevention and Occupational Health. Mr. Ellis signed the notices.

Mr. Kelley introduced us to Max Forinash, Foreman in the Electrical Department and Jerry Hatfield, Electrical Supervisor. Mr. Forinash is responsible for marking PCB items and maintains a working file concerning PCBs. Mr. Hatfield is in charge of the job safety program and keeps a quarterly PCB inspection record.


R00300899
RCRA RECORDS CENTER

Both Mr. Kelley and Mr. Forinash accompanied us during the inspection. Mr. Kelley signed the receipt for samples.

Mr. Kelley said Harry Holiday, Jr., was the Chief Executive Officer. He is located in Armco's general office, 703 Curtis, Middletown, Ohio 45043. A list of corporate officers and the firm's financial status may be found in the attached 1981 corporate report. In addition to the firm's corporate counsel, they use Lathrop and Koontz in Kansas City.

INSPECTION

The inspection of this facility began at 10 a.m. on May 11, 1982. Mr. Kelley provided the history of the firm and a copy of the 1981 corporate report. He said he had been with the company five years and had a B.A. in chemistry and an M.S. in industrial hygiene. He was familiar with the PCB regulations and had a copy. He said the company compiled a list of their PCB hydraulic systems in 1976 and switched those systems to non-PCB fluids. He gave us a list dated January 10, 1977, and copies of subsequent PCB testing of the fluids in those systems (see attachment 2, six pages).

Mr. Kelley showed us PCB annual reports for 1978, '79, '80 and '81. We obtained copies of those and include them in this report at attachment 3. We received the annual reports, reviewed them and asked Mr. Forinash to explain the transformer number used in the report. He said they had numbered every transformer in the plant, regardless of whether it contained PCB or mineral oil. The number was painted on the transformer and corresponding data sheets were prepared to show serial numbers, KVA, etc. Data sheets are filed in the main substation building. The blank for line 8 in the capacitor list could not be explained.

Since the annual reports showed disposal of PCB items, we asked to see pertinent shipping documents. Attachment 4, consisting of a manifest and a bill of lading is representative of those documents. Mr. Kelley stated that they had disposed of items at Cecos International, 52 Aber Road, Williamsburg, Ohio, in years past, but had switched to Environmental International, 912 Scott, Kansas City, Kansas, because it was closer.

We asked Mr. Forinash how he knew some transformers were not PCB transformers. He said all of the company's transformers that didn't indicate PCBs on the nameplates had been tested for PCBs. He showed us a summary of those tests (see attachment 5) and individual lab reports. Most of the analyses were done by Grey Laboratories, Inc., 804 Woodswether Road, Kansas City, Missouri 64105, telephone 816/842-1376. Westinghouse had also tested some of the transformer fluid. Mr. Hatfield said the testing was done over a one month period in 1979-80.

Mr. Hatfield provided his records of quarterly PCB transformer inspections for our perusal. He stated that all oil-filled transformers are included in the quarterly inspection. Two pages were copied as examples (attachment 6). We noted some leaks had been stopped with epoxy. Mr. Hatfield gave us a copy of

a technical bulletin for Epoxy Lite (attachment 7) and said that was the product used. He said he first cleans the area to be repaired with trichloroethylene. Most of the leaks occur around drain or sampling valves.

Since Mr. Hatfield is in charge of the job safety program, we asked him about safety equipment for employees. He said a full range of safety equipment was provided. He showed us written job instructions for various jobs and a manual entitled, "Job Safety Analysis Training Guide." We copied two of the JSA's concerning PCBs (attachment 8). They covered filtering and sampling transformer insulating fluid. Both Mr. Kelley and Mr. Hatfield discussed spill clean-up procedures and said the only spill they had was in 1960.

Mr. Kelley said the electromagnets used in the plant did not contain PCBs. He said the plant did not have any exemptions from the PCB rule. He said most of the plant was probably in the 100-year floodplain; the tractor shed probably wouldn't be.

Tour: After leaving Mr. Kelley's office, we went to the main substation where we saw the data sheets for each transformer. Mr. Forinash also unlocked a cabinet of safety equipment and explained that all foremen have a key to it. He showed us the PCB storage for disposal area and we photographed it (photos 1 through 5). We noted the area was not marked M_L, so Mr. Forinash applied an M_L sticker to the sign on the gate. The sign said, "Notice: Waste Askeral PCB Requires Special Disposal. Disposal will be arranged by electrical general foreman only." There were two 55-gallon drums marked M_L in the storage facility. Mr. Forinash said they contain PCBs for topping transformers and were listed in the annual reports. The other drums in the area were empty. The drums of PCB were in an L-shaped steel tray. The tray was nine inches deep. Each leg of the L was two and one-half feet wide. One leg was six and one-half feet long and the other was six feet, eight inches long. Outside the storage area we looked at transformer #231; it was marked M_L.

Next we went to the tractor shed and saw four large PCB transformers stored for use; each was marked M_L and were numbered 152, 153, 154 and 155.

Our last part of the tour took us to the #1 melt shop. We saw 59 PCB capacitors stored for use (photo 6). The annual report showed 58 and neither Mr. Forinash or Mr. Kelley could recall where the extra capacitor came from. We noted four capacitors had four-inch by four-inch M_L's and suggested that Mr. Forinash replace them with six-inch stickers. In the same building we looked at large banks of PCB capacitors in service (photo 7). Mr. Forinash said they were in the electric furnace circuitry. Some had four-inch M_L's and others had six-inch. Mr. Forinash said he had run out of six-inch when he was marking them so he used the four-inch. He said the four-inch were also easier to put on. Also in that building we looked at PCB transformers 171, 173, 175 and 200. All were properly marked. We asked Mr. Forinash how he knew #173, an ITE transformer, contained askeral, as shown in the annual report. He said he didn't know that for sure, but assumed it did since it said non-flammable on the nameplate.

RCRA

On May 12, 1982, we presented our credentials to Robert W. Davis, Superintendent of Energy and Environment. He said the Missouri Department of Natural Resources (MDNR) had conducted hazardous waste inspections in the facility in October 1981 and May 1982. We explained that we had just completed a PCB inspection at the plant and had instructions to complete a RCRA checklist and look at the hazardous waste storage areas. Mr. Davis said he was an engineer and had been with the firm 33 years. He told us the plant had two EPA identification numbers, one for each operating division. Midwestern Steel Division's was MODO07118029 and the Union Wire Ropes was MODO01686740. He said most of the plant was in the 100-year floodplain. He answered the questions on our checklist (attached) and then took us to his office where he introduced us to Leland Scott, an air pollution specialist. Both Mr. Davis and Mr. Scott accompanied us during the inspection.

Mr. Davis produced records for our review. We noted a letter dated March 1, 1982, to David Wagoner, stating that a contingency plan was submitted to the Kansas City Fire Department, the St. Joseph Hospital and the Kansas City Police Department. We photocopied one manifest showing shipment of waste sulfuric acid to Chain of Rocks, 10450 River View Drive, St. Louis, Missouri (attachment 9). We saw the inspection log for storage tanks and copied one page concerning/pickle liquor tank outside the west cleaning house (attachment 10).

We toured the storage areas, beginning with the pickle liquor tank mentioned above. Mr. Davis said that particular tank was being repaired. Ordinarily, it would contain pickle liquor (sulfuric acid) from which iron sulfate could be reclaimed through a chilling process and sold as a flocculant. Some of the treated acid rinse water goes to an area at Union Wire Rope and is aerated, then discharged into the Blue Valley Sewage Treatment Facility. It neutralized the alkaline waters in that system and it acts as a flocculant. Mr. Davis said that was a good engineering practice, but the state didn't like it. There was another similar tank in operation at the site, and both had retaining walls around them. Mr. Davis said the firm has an NPDES permit for discharging to the Blue River. He said it was due for renewal in January 1983.

Next we went to the bar joist shop and saw 105/55-gallon drums of paint sludge and five/55-gallon barrels of waste trichloroethylene on pallets (photos 8 through 10). Mr. Davis said the shop stopped operation in December 1980 and the paint sludge accumulated from the clean-up of lines, pits, etc. The drums of chlorinated solvents were marked "hazardous waste" but the drums of paint sludge were not.

In the area of the tractor shed we observed the alkali storage area. About 20 open drums of alkaline cleaner were stored there. Mr. Davis said the material has a pH of about 12. It had been sitting there since last summer. He said he plans to have the maintenance shop pump all of the liquid out of the drums and use it to neutralize acid in the wire rope operation instead of buying alkaline substances for that use. He said MDNR told him they would approve recycling

the material subject to approval of his plan. The drums were not marked "hazardous waste."

In the Rock Creek area we saw large cooling water ponds with a pump house and lines going to and from the plant. Next to it, in an open field, was an area posted as a hazardous waste site. Mr. Davis said that was the area where they disposed of baghouse dust from the two melt shops. He said the dust which may contain lead, chromium and cadmium is piled there and covered with dirt on a continuous basis. There are two cells; one is considered finished and closed.

Next to two galvanizing plants we saw a two-celled pond for collected electroplating sludge (photos 11 through 13). There is a batch feed system into the larger cell and that cell can be used as a holding pond. The flow from the smaller second cell is into the city sewer. Mr. Davis said he was trying to get the electroplating sludge delisted as a hazardous waste.

Mr. Davis said he had about two/55-gallon drums of phosphoric acid cleaner stored, but we didn't need to see them because he didn't consider them hazardous wastes yet. He thought he might still use them.

At Union Wire Rope we saw the treated acid rinse water area and acid crystalizer working tank and a reclaimed acid tank. Both of the tanks were diked, both were on the weekly inspection list. On a marked dock we observed 12 or 20/55-gallon drums with hazardous and painstripper painted on them. Mr. Davis said they contained paintstripper which accumulated from cleaning stencils used in painting wooden reels. He said some had been sold to Solvent Recovery in Kansas City. He was considering incinerating the remainder. He said MDNR suggested the material be cemented or chemically fixed. He indicated the drums accumulate slowly, but on a regular basis. Some had been there for a year. None of the drums had a yellow hazardous waste mark.

Mr. Davis introduced us to Mr. Gerald Baughn, lubrication engineer in charge of waste oil disposal. Mr. Baughn said he had only been in that position about 90 days and had not personally disposed of any waste oil, but was familiar with the procedure. He said used machine lubes were hauled away by a reclaimer and filtered and brought back as reuseable oil sludge. The sludge and other unuseable oils are stored in two railroad tank cars. The tramp oils are generated throughout the plant. They come from gear boxes, floor spills, the chip conveyor in the nut/bolt plant, etc. Some contain phosphate esters. About two times per year Radium Petroleum 1633 South Marsh Avenue, Kansas City, hauls away a tank truck load (about 6,000 gallons). The tank cars are not agitated, so Mr. Baughn said there might be thick sludge in the bottom of each car. He said each load was sampled and analyzed for PCBs. He showed us records of those analyses and we copied one as an example (attachment 11). Tests were made by Grey Laboratories, Inc.

DISCUSSION WITH MANAGEMENT

The closing discussion regarding PCBs at Armco Steel was with Rod Kelley and Berl Ellis. A summary of observations was prepared and presented to Mr. Kelley for his signature. Four discrepancies were noted and discussed with those gentlemen (see attached copy of summary). Mr. Kelley said he would like a

written opinion from the KCRO as to whether or not he could sell the four PCB transformers stored in the tractor shed. He said we had not looked at anything considered confidential. The PCB inspection ended at 4 p.m.

The discussion regarding RCRA at Armco Steel was with Robert W. Davis. The discussion was held throughout the inspection and no closing recommendations were made. The RCRA inspection ended at 12 noon on May 12.

Attachments: Notice of Inspection
Confidentiality Notice
Corporate Report
Receipt for Samples
Summary of Observations
Hydraulic Information
Annual Reports ('78, '79, '80, '81)
Shipping Documents
Quarterly Inspection Reports
Oil-filled Transformer Information
Epoxy Lite Technical Bulletin
JSA's (2)
RCRA Checklist
Waste Oil Analysis
Sulfuric Acid Manifest
Pickle Liquer Checksheet
Photos

David A. Ramsey
Consumer Safety Officer
May 19, 1982

Ruben B. McCullers
Consumer Safety Officer

EPA IDENTIFICATION NUMBER:
MODO07118029 &
MODO01686740

RCRA INSPECTION REPORT - INTERIM STATUS STANDARDS
TREATMENT, STORAGE, AND DISPOSAL FACILITIES
Form 1 - General Facility Standards

DRAFT COPY
SUBJECT TO REVISION

I. General Information:

(A) Facility Name: ARMCO STEEL

(B) Street: 7000 ROBERTS

(C) City: KANSAS CITY (D) State: MO (E) Zip Code: 64125

(F) Phone: 816-242-5506 (G) County: JACKSON

(H) Operator:

(I) Street:

(J) City: (K) State: (L) Zip Code:

(M) Phone: (N) County:

(O) Owner:

(P) Street:

(Q) City: (R) State: (S) Zip Code:

(T) Phone: (U) County:

(V) Type of Ownership: ___ Federal ___ Municipal ___ Private ___ State ___ County

(W) Date of Inspection: 5-12-82 (Q) Time of Inspection (From) 8:30a (To) 12 noon

(X) Weather Conditions: RAIN

(1) Person(s) Interviewed	Title	Telephone
Robert W. Davis	Supt. of Energy & Envt.	816 242-5870

(2) Inspection Participants	Title	Telephone
Same		

David A. Ramsey — Rulon B McCallum

II. Description of Site Activity

(A) ✓ Generator (~~Form 2~~)

(B) ✓ Transporter (~~Form 3~~) License of State (Not used)

(C) ____ Chemical, Physical and Biological Treatment (~~Form 4~~)

(D) ✓ Storage (~~Form 5~~)

(E) ____ Landfill (Form ~~6~~)

(F) ____ Incineration (~~Form 7~~)

(G) ____ Land Treatment (Form ~~4~~)

(H) ____ Thermal Treatment (~~Form 7~~)

(I) Comments: _____

Supplemental forms (Listed in Parathesis) must be completed for each activity inspected. Attach all Supplemental forms to this report.

	Yes	No	Not Inspected	See Remark Number
(J) Has this facility Submitted a Part A Permit Application?	✓			

RCRA COMPLIANCE INSPECTION REPORT
GENERATORS CHECKLIST

Section A - EPA Identification No.

1. Does Generator have EPA I.D. No.? ✓ Yes ___ No

   a. If yes, EPA I.D. No. MOD007118029 (manifest)
   Union Wire Rope MO D000168740

262.21 Section B - Manifest

1. Does generator ship waste off-site? ✓ Yes ___ No

   a. If no, do not fill out Sections B and D.

   b. If yes, identify primary off-site facility(s) Use narrative explanations sheet.)

2. Does generator use Manifest? ✓ Yes ___ No

   a. If no, is generator a small quantity generator? ___ Yes ___ No
      1. If yes, does generator indicate this when sending waste to a T/S/D facility ___ Yes ___ No

   b. If yes, does manifest include the following information?

Photocopy of one

1. Manifest Document No. ✓ Yes ___ No
2. Generators Name, Mailing Address, Telephone No. ___ Yes ___ No
3. Generator EPA I.D. No. ___ Yes ___ No
4. Transporter(s) Name and EPA I.D. No. ___ Yes ___ No
5. a. Facility Name, Address and & EPA I.D. No. ___ Yes ___ No
   b. Alternate Facility Name, Address and EPA ID NO. ___ Yes ___ No
   c. Instructions to return to generator if undeliverable? ___ Yes ___ No
6. Waste information required by DOT (49 CFR) - Shipping name, quantity, (weight, or vol.) containers (type and number.) ___ Yes ___ No
7. Emergency Information (optional) (special handling instructions, phone no.) ___ Yes ___ No

(16.) ~~M~~ ST. LOUIS H2O TREATMENT

ST. LOUIS, MO.

(8) Is the following certification on each manifest form? ___ Yes ___ No

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

(9) Does Generator retain copies of Manifests? ✓ Yes ___ No

If yes, complete a through e.

a. (1) Did generator sign and date all manifests? ✓ Yes ___ No
(2) Who signed for generator? Name _____ Title _____

b. (1) Did generator obtain handwritten signature and date of acceptance from initial transporter? ✓ Yes ___ No
(2) Who signed and dated for transporter? Name _____ Title _____

c. Does generator retain one copy of manifest signed by generator and transporter? ✓ Yes ___ No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? ✓ Yes ___ No

e. Does generator retain copies for 3 years? ✓ Yes ___ No

SUBJECT TO CLARIFICATION (TRASPORTER NEGLECTED TO GET MANIFEST SIGNED (ONLY BILL OF LADING). STRAIGHTENED OUT NOW

Section C - Hazardous Waste Determination

262.12 1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? PICKLE LIQUOR ___ Yes ___ No

SPENT SULPHURIC ACID USED TO CLEAN OFF IRON OXIDE

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) LOW PH — ACID

2. Does generator generate solid waste(s) that exhibit hazardous characteristics? (corrosovity, ignitability, reactivity, EP toxicity) ✓ Yes ___ No

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) BAG HOUSE DUST, PLANT SLUDGE LEAD, CAD, CHROME

b. Does generator determine characteristics by testing or by applying knowledge of processes? HAVE TESTED BUT NO EVERY MONTH

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or Equivalent)? ✓ Yes ___ No

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? ✓ Yes ___ No

   a. If yes, did generator test all wastes to determine non-hazardous characteristics? ✓ Yes ___ No

      1. If no, list wastes and quantities deemed non-hazardous or processes from which non-hazardous waste was produced? (Use additional sheet if necessary.)

ELECTROPLATING SLUDGE WAS LISTED BUT TESTING SHOWED NO HAZARDOUS WASTES.

STATE HAS INSPECTED FACILITY TWICE. OCT 81, MAY, 82

Section D - Pre-Transport Requirements

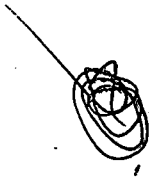
1. Does Generator package waste in accordance with 49 CFR 173 178, and 179? (DOT requirements) ✓ Yes ___ No

265.174 2. a. Are containers to be shipped leaking or corroding? ___ Yes ✓ No BULK
   b. Use sheet to describe containers and condition.
   c. Is there evidence of heat generation from incompatible wastes in the containers? ___ Yes ✓ No

262.32 3. Does the generator use DOT labeling requirements in accordance with 49 CFR 172? ✓ Yes ___ No

4. Does the generator mark each package in accordance with 49 CFR 172? ✓ Yes ___ No

5. Is each container of 110 gallons or less marked with the following label? ✓ Yes ✓ No



Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest policy or public safety authority or the U.S. Environmental Protection Agency.

Label mpsib A.W. Label

Generator's Name and Address _____

_____

Manifest Document Number _____ _____

262.33 6. Does generator have placards to offer to transporters? ✓ Yes ___ No

262.34 7. Accumulation Time

   a. Are containers used to temporarily store waste before transport? ✓ Yes ___ No

1. If yes, is each container clearly dated? Also, fill out rest of No. 7 (Accum. Time) ___ Yes ✓ No

b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - inspections) ✓ Yes ___ No
2. If yes, with what frequency? WEEKLY

c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) ✓ Yes ___ No

LOOK AT STORAGE AREA

NOTE: If tanks used, fill out checklist for tanks.

d. Are the containers labeled and marked in accordance with Section D 3, 4, & 5 of this form? ___ Yes ___ No

NOTE: If generator accumulates waste on-site fill out checklist for General Facilities, Subparts C and D.

e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training). ✓ Yes ___ No

PROF. ENGINEERS TRAINING SESSIONS VIA EPA STATE & IN HOUSE

8. Describe storage area. Use photos and narrative explanation sheet.

.40 Section E - Recordkeeping and Records

1. Does generator keep the following reports for 3 years?

a. Manifests and signed copies from designated facilities? ✓ Yes ___ No
b. Annual reports IN ABEYANCE ___ Yes ___ No
c. Exception Reports ? ___ Yes ___ No
d. Test results ✓ Yes ___ No

2. Where are records kept (at facility or elsewhere)? IN MR. DAVIS' OFFICE
3. Who is in charge of keeping the records? Name ~~_____~~ SAME Title _____

Section F - Special Conditions

262.50 1. Has generator received from or transported to a foreign source any hazardous waste? ___ Yes ✓ No
a. If yes, has he filed a notice with the Regional Administrator? ___ Yes ___ No
b. Is this waste manifested and signed by Foreign consignee? ___ Yes ___ No
c. If generator transported wastes out of the country has he received confirmation of delivered shipment? ___ Yes ___ No

RCRA COMPLIANCE INSPECTION REPORT
TSD FACILITIES CHECKLIST

Section A - General Facility Standards

262.12 1. Does facility have EPA Identification No.? ✓ Yes ___ No

A. If yes, EPA I.D. No. _____
If no, explain _____

262.50 2. Has facility received hazardous waste from a foreign source? ___ Yes ✓ No

A. If yes, has he filed a notice with the Reg. Admin. ___ Yes ___ No

265.13 Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? ✓ Yes ___ No

A. If yes, does it include

(1) Parameters for which each waste will be analyzed? ✓ Yes ___ No

(2) Test methods used to test for these parameters? ✓ Yes ___ No

(3) Sampling method used to obtain sample? ✓ Yes ___ No

(4) Frequency with which the initial analysis will be reviewed or repeated? ✓ Yes ___ No

(5) (for off-site facilities) Waste analyses that generators have agreed to supply? ___ Yes ___ No N/A

(6) (for off-site facilities) Procedures which are used to inspect and analyze each movement of hazardous waste including: N/A

a. Procedures to be used to determine the identity of each movement of waste? ___ Yes ___ No

b. Sampling method to be used to obtain representative sample of the waste to be identified? N/A ___ Yes ___ No

265.14 4. Does the facility provide adequate security through

A. 24-hour surveillance system? (e.g. television monitoring or guards) ✓ Yes ___ No

OR

B. (1) Artificial or natural barrier around facility (e.g. fence or fence and cliff)? ✓ Yes ___ No
Describe CHAIN LINK FENCE - 3 BARB
AND
RIVER

(2) Means to control entry through entrances (e.g. attendant, television monitors, locked entrance, controlled roadway access)? ✓ Yes ___ No
Describe GUARDS

General Inspection Requirements

265.15(b) 5. Does the owner/operator maintain a written schedule at the facility for inspecting:

a. Monitoring equipment? ✓ Yes ___ No

b. Safety and emergency equipment? ✓ Yes ___ No

c. Security devices? ✓ Yes ___ No

d. Operating and structural equipment? ✓ Yes ___ No

e. Types of problems of equipment?

1. malfunction ___ Yes ___ No

2. operator error ___ Yes ___ No

3. discharges ___ Yes ___ No

FACILITY IS IN 100 YEAR FLOOD PLAIN. PARTS OF PLANT ARE NOT.

265.15(d) 6. Does the owner/operator maintain an inspection log? ✓ Yes ___ No

A. If yes, does it include:

(1) Date and time of inspection? ✓ Yes ___ No

(2) Name of inspector? ✓ Yes ___ No

(3) Notation of observations? ✓ Yes ___ No

(4) Date and nature of repairs or remedial action? ✓ Yes ___ No

B. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet). ___ Yes ✓ No

265.16 Personnel Training

7. Does the owner/operator maintain Personnel Training Records at the facility? ✓ Yes ___ No
How long are they kept? YEAR OR MORE

A. If yes, do they include:

(1) Job title and written job description of each position? ✓ Yes ___ No

(2) Description of type and amount of training? ✓ Yes ___ No

(3) Records of training given to facility personnel? ✓ Yes ___ No

265.17 Requirements for Ignitable, Reactive or Incompatible Waste

(a) 8. Does facility handle ignitable or reactive wastes? ✓ Yes ___ No

A. If yes, is waste separated and confined from sources of ignition or reaction, (open flames, smoking, cutting and welding, hot surfaces, frictional heat) sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat producing chemical reactions) and radiant heat? ✓ Yes ___ No

1. If yes, use narrative explanations sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

B. Are smoking and open flame confined to specifically designated locations? ___ Yes ___ No CHECK AREA

C. Are "No Smoking" signs posted in hazardous areas? ___ Yes ___ No

(b) 9. Check containers

A. Are containers leaking or corroding? ___ Yes ___ No

B. Is there evidence of heat generation from incompatible wastes? ___ Yes ___ No
(Use narrative explanations sheet to describe condition of containers.)

265.31 Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion or contamination of the environment? ___ Yes ___ No

If yes, use narrative explanations sheet to explain.

265.32 2. Is the facility equipped with IN PLANT PHONES 2 RADIO FREQUENCIES

A. Internal communication or alarm system? ✓ Yes ___ No

(1) Is it easily accessible in case of emergency? ✓ Yes ___ No

B. Telephone or two-way radio to call emergency response personnel? ✓ Yes ___ No

C. Portable fire extinguishers, fire control equipment spill control equipment and decontamination equipment? ✓ Yes ___ No

265.33 (1) Is this equipment tested to assure its proper operation? ✓ Yes ___ No 30 DAY CHECKS

D. Water of adequate volume for hoses, sprinklers or water spray system? ✓ Yes ___ No

(1) Describe source of water K.C. MO City H2O supply

265.35 3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? ✓ Yes ___ No

265.37 4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) ✓ Yes ___ No

265.50 5. In the case that more than one police and fire department might respond, is there a designated primary authority? ✓ Yes ___ No
a. If yes, list primary authority KC MO

265.52 (a) 6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors and equipment suppliers? ✓ Yes ___ No
Are they readily available to all personnel? ___ Yes ✓ No

(c) 7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? ✓ Yes ___ No
ST. JOE

8. If State or local authorities decline to enter, is this entered in the operating record? UNKNOWN ___ Yes ___ No

265.52 Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? ✓ Yes ___ No

a. If yes, is it a revised SPCC Plan? ✓ Yes ___ No

2. Is there an emergency coordinator on site at all times? ✓ Yes ___ No

Section D - Manifest System, Recordkeeping and Reporting

265.71 1. Does facility receive waste from off-site? ___ Yes ✓ No

a. If yes, does the owner/operator retain copies of all manifests? ___ Yes ___ No

(1) Are the manifests signed and dated and returned to the generator? ___ Yes ___ No

(2) Is a signed copy given to the transporter? ___ Yes ___ No

2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? ___ Yes ___ No

a. If yes, is it accompanied by a shipping paper? ___ Yes ___ No

(1) Does the owner/operator sign and date the shipping paper and return a copy to the generator? within 30 days ___ Yes ___ No

(2) Is a signed copy given to the transporter? ___ Yes ___ No

265.72 3. Has the owner/operator received any shipments of waste which were inconsistent with the manifest? (manifest discrepancies) ___ Yes ___ No

a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? ___ Yes ___ No

1. If no, has Regional Administrator been notified? ___ Yes ___ No

265.73 4. Does the owner/operator keep a written operating record at the facility? N/A ___ Yes ___ No

A. If yes, does it include:

(1) Description and quantity of each hazardous waste received? ___ Yes ___ No

(2) Location and quantity of each hazardous waste at each location? ___ Yes ___ No

(3) Records and results of waste analyses? ___ Yes ___ No

(4) Reports of incidents involving implementing of the contingency plan? ___ Yes ___ No

(5) Records and results of required inspections? ___ Yes ___ No

(6) Monitoring, testing or analytical data? ___ Yes ___ No

(7) Closure cost estimates and for disposal facilities post-closure cost estimates? (Not effective until May 19, 1981.) ___ Yes ___ No

265.76 b. Has the facility received any waste (that does not come under the small generater exclusion) not accompanied by a manifest? ___ Yes N/A ___ No

a. If yes, has he submitted an unmanifested waste report to the Regional Administrator? ___ Yes ___ No

Subpart N

LANDFILLS CHECKLIST

302 1. Is run-on diverted from the landfill? (Effective November 19, 1981) ____yes___no

2. Is run-off from the landfill collected? (Effective November 19, 1981) ____yes___no

a. Is this waste analyzed to determine if it is a hazardous waste? ____yes___no

(1) If it is a hazardous waste, how is it managed? (Use narrative explanations sheet)

(2) Is the collected run-off discharged through a point source to surface waters? ____yes___no

(a) If yes, list NPDES Permit Number_____

3. Is the landfill managed so that wind dispersal is controlled? (Note blowing debris) ____yes___no

4. Is the following information maintained in the operating record? ____yes___no

5. Are reactive or ignitable wastes placed in the landfill? ____yes___no

a. If yes, is it treated, rendered or mixed before or immediately after placement in the landfill so it is no longer reactive or ignitable? ____yes___no

b. Describe treatment, etc, or attach a copy of treatment.

6. Are incompatible wastes placed in the same landfill? ____yes___no

7. Are bulk or non-containerized liquid wastes or wastes containing free liquids placed in the landfill? (Effective November 19, 1981) ____yes___no

a. If yes, does the landfill have
(1) A chemically and physically resistant liner? ____yes___no
(2) Functioning leachate collection and removal system? ____yes___no

or

b. 1. Is the liquid waste treated chemically or physically so that free liquids are no longer present? (Effective November 19, 1981) ____yes___no

314 8. Are containers holding liquid wastes placed in the landfill? ___yes___no

a. If yes, is the container designed to hold liquids for a use other than storage? (eg battery, capacitor) (Effective November 19, 1981) ___yes___no

265.315 9. Are empty containers placed in the landfill? ___yes___no

a. If yes, are they reduced in volume (eg shredded, crushed)? (Effective November 19, 1981) ___yes___no

10. Is there evidence of site instability? (e.g. erosion, settling)? ___yes___no (Use narrative explanations sheet)

11. Is there evidence of ponding of water on-site? ___yes___no (Use narrative explanation sheet)

12. Is there any indication of improper or inadequate drainage? ___yes___no (Use narrative explanations sheet)

310 13. Does the facility maintain closure and post-closure plans? ___yes___no

Subpart L

WASTE PILES CHECKLIST

NOTE: Waste piles may also be managed as a landfill.

.251 1. Is the pile containing hazardous waste protected from wind? ___yes___no

.252 2. Is a representative sample of waste from each incoming shipment analyzed before the waste is added to the pile to determine the compatibility of the wastes? ___yes___no

3. Does the analysis include a visual comparison of color and texture? ___yes___no

.253 4. Is the leachate or run-off from the pile considered a hazardous waste? (Effective November 19, 1981) ___yes___no

a. If yes, is the pile managed with the following?

(1) An impermeable base compatible with the waste? ___yes___no
(2) Run on diversion? ___yes___no
(3) Leachate and run-off collection? ___yes___no

or

b. 1. Is the pile protected from precipitation and run-on by some other means? ___yes___no

.256 5. Are ignitable or reactive wastes placed in the pile? ___yes___no

a. If yes, does the addition of the waste result in the waste or mixture no longer meeting the definition? (Use narrative explanation sheet to describe procedure) ___yes___no

or

b. Is the waste protected from sources of ignition or reaction? ___yes___no

(1) If yes, use narrative explanations sheet to describe separation and confinement procedures.

(2) If no, use narrative explanations sheet to describe sources of ignition or reaction.

6. Is the pile separated from other sources of reaction by a dike, berm or wall? ___yes___no

7. Is there evidence of fire, explosion, gaseous emissions, leaching or other discharge? (Use narrative explanation sheet) ___yes___no

2.

11. Does the facility maintain a record of the closure plan on site? (Effective May 19, 1981) ___yes___no

12. Are ignitable or reactive wastes placed in the impoundment? ___yes___no

    a. If no, do not complete b and c.
    b. If yes, are they treated, rendered or mixed before or immediately after placement in the impoundment so it no longer meets the definition of ignitable or reactive? ___yes___no

    or

    c. Is the impoundment used solely for emergencies? ___yes___no

13. Are incompatible wastes placed in the impoundment? ___yes___no

Subpart O

INCINERATORS CHECKLIST

(343 1. Is the incinerator operating at steady state conditions (temperature and air flow) before adding hazardous waste? ____yes___no

265.345 2. Is a waste analysis documented on the operating record that includes:

a. Heating value ____yes___no
b. Halogen content ____yes___no
c. Sulfur content ____yes___no
d. Concentration of lead ____yes___no
e. Concentration of mercury ____yes___no

(Note: d.e ~~Use~~ not required if facility has written documented data that show the elements are not present.

265.347 3. Does the owner/operator monitor the following when incinerating hazardous waste?

a. At least every 15 minutes, existing instruments which relate to combustion and emission control including:

(1) Waste feed ____yes___no
(2) Auxiliary fuel feed ____yes___no
(3) Air flow ____yes___no
(4) Incinerator temperature ____yes___no
(5) Scrubber flow ____yes___no
(6) Scrubber pH ____yes___no
(7) Relevant level controls ____yes___no

b. Stack plume (emissions) at least hourly for:

(1) Color (normal) ____yes___no
(2) Opacity ____yes___no

c. Incinerator and associated equipment at least daily including:

(1) Pumps, valves, conveyors, pipes for leaks, spills, and fugitive emissions (Use narrative explanations sheet) ____yes___no
(2) Emergency shutdown controls ____yes___no
(3) System alarms ____yes___no

265.351 4. Is a closure plan maintained at the facility? (Effective May 19, 1981) ____yes___no

Subpart J

TANKS CHECKLIST

1. Are there any tanks which are not being used which the facility no longer plans to use? ___yes ✓no

   a. If yes, has all hazardous waste and hazardous waste residue been removed from these tanks, discharge control equipment, and discharge confinement structures? ___yes ___no

265.192 2. Are tanks presently used to treat or store waste? ✓yes ___no

   a. If no, do not complete rest of form.
   b. If yes, check tanks.

   ✓ Is there evidence that incompatible wastes have been placed in the tank? Is there evidence of any ruptures, leaks or corrosion? (Use narrative explanations sheet) ___yes ___no

3. Are there any uncovered tanks? ___yes ___no

   ✓ a. If no, do not complete ~~B-E~~ b-e
   b. If yes, do they have 2 feet (60cm) freeboard? ___yes ___no

   or

   c. A containment structure? (e.g. dike or trench) ___yes ___no

   or

   d. A drainage control system? ___yes ___no

   or

   e. A diversion structure? (e.g. standby tank) ___yes ___no
   (NOTE: The structure in c,d or e must have a capacity that equals or exceeds the volume of the top 2 feet (60cm) of the tank.

4. Are any of the tanks continuous feed? ✓yes ~~✓~~no
   pond or Batch feed

   a. If yes, is it equipped with a means to stop inflow (e.g. waste feed cutoff or by-pass to a stand-by tank)? ___yes ___no

electroplating waste
Pond
Effluent

2.

1 33 Waste Analysis

5. Is the tank used to store one waste exclusively? ✓ yes ___ no

   a. If no, what are the different wastes stored in the tank? (Use narrative explanations sheet)

   b. Are waste analyses and trial treatment or storage tests done on these different wastes? ✓ yes ___ no
   Wastes have been tested occasionally, as constant, across the

   (1) If no, does he have written, documented information on similar storage or treatment of similar wastes? ~~✓~~ yes ___ no

   c. Are there records available of these waste analyses in the operating record? ✓ yes ___ no

265.194 Inspections:

6. Does the owner/operator inspect the following at least daily? ✓ yes ___ no

   a. Discharge control equipment (e.g. waste feed cut-off, by pass and/or drainage systems)? ✓ yes ___ no

   b. Monitoring equipment (e.g. pressure and temperature gages)? ✓ yes ___ no

   c. Level of waste in each uncovered tank? ✓ yes ___ no

7. Does the owner/operator inspect the following at least weekly? ___ yes ___ no

   a. Construction materials of tanks for corrosion or leaks? ✓ yes ___ no
   b. Construction materials of and area surrounding discharge confinement structures for erosion or signs of leakage? ✓ yes ___ no

8. Is a written schedule of these inspections kept at the facility? ✓ yes ___ no

9. Does the facility maintain a record of the closure plan on site? ✓ yes ___ no
   dated Feb '82.

10. Are ignitable or reactive wastes placed in tanks? ✓ yes ___ no H_2SO_4

   a. If yes, are they treated, rendered or mixed before or immediately after placement in the tank so it no longer meets the definition of ignitable or reactive? ___ yes ✓ no
   Overpicked of mix.

   Or

   b. Is the waste protected from sources of ignition or reaction? ✓ yes ___ no

3. (continued)

(1) If yes, use narrative explanations sheet to describe separation and confinement procedures

(2) If no, use narrative explanations sheet to describe sources of ignition or reaction

or

c. Is the tank used solely for emergencies? ___yes___no

11. Are incompatible wastes placed in the same tank? ___yes ✓no

12. If a waste is to be placed in a tank that previously held an incompatible waste, was that tank washed? tanks dedicated ___yes ✓no

a. If yes, describe washing procedures (Use narrative explanations sheet)

Describe how it is possible for incompatible waste to be placed in the same tank. (Use narrative explanations sheet)

10,13 outside building (physical separation)

Subpart M

LAND TREATMENT CHECKLIST

272 1. Is run-on diverted away from the land treatment facility (Effective May 19, 1981) ____yes__no

2. Is run-off from the land treatment facility collected? (Effective May 19, 1981) ____yes__no

3. Is the runoff analyzed to see if it is a hazardous waste? ____yes__no

   a. If the run-off is considered hazardous, how is it handled? (Use narrative explanations sheet)

   b. If it is not a hazardous waste, is it discharged through a point source to surface waters? ____yes__no

      (1) If yes, list NPDES Permit No._____

4. What hazardous wastes are treated at the land treatment facility?

Subpart D Listed Wastes

Characteristic Wastes (EP Toxicity)

265.273 A. For those listed wastes, were analyses done to determine the concentrations of those constituents which caused the waste to be listed?

   (1) If yes, what are these concentrations? (Use narrative explanation sheet)

B. For those characteristic Wastes (EP) Toxicity, what are the concentrations of the following

	Concentration (Mg/l)	Waste
Arsenic		
Barium		
Cadmium		
Chromium		
Lead		
Mercury		
Selenium		
Silver		
Endrin		
Lindane		
Methoxychlor		
Toxaphene		
2,4 D		
2,4,5-TP Silvex		

.76 5. Are food chain crops grown? ____yes___no

a. If yes, what are the concentrations of the following in the soil and vegetation.

	Soil Concentration (mg/l)	Vegetation Concentration (mg/l)
Arsenic		
Cadmium		
Lead		
Mercury		

6. Did the facility notify the RA that he is growing food chain crops? ____yes___no

7. Is the following information kept at the facility? ____yes___no

a. Tests for the specific wastes and application rates being used at the facility? ____yes___no
b. Crop characteristics? ____yes___no
c. Soil characteristics? ____yes___no
d. Sample selection criteria? ____yes___no
e. Sample size determination? ____yes___no
f. Analytical methods used? ____yes___no
g. Statistical procedures? ____yes___no

8. Does the facility treat waste that contains cadmium? ____yes___no

a. If no, do not fill out b&c

b. If yes, was the pH of the soil and waste mixture 6.5 or greater at the time of each waste application? ____yes___no

(1) If the pH was less than 6.5, did the waste contain cadmium concentrations of 2mg/Kg or less? ____yes___no

c. Is the annual application rate of cadmium less than 0.5 Kg/ha (Kilograms per hectare) for the following: tobacco, leafy vegetables, or root crops grown for human consumption ____yes___no

(1) For all other food chain crops, is the annual cadmium application rate less than 2.0 Kg/ha (Until 6/30/84) ____yes___no

265.278 9. Is an unsaturated zone monitoring plan kept at the facility? ____yes___no

10. Does the plan include:

a.	Soil monitoring	____yes___no
b.	Soil pore water monitoring	____yes___no
c.	Sample depths below waste incorporation	____yes___no
d.	Number of samples to be taken	____yes___no
e.	Frequency and time of sampling	____yes___no
f.	Analysis of samples	____yes___no

265.279 11. Are records kept at the facility of

a.	Application dates	____yes___no
b.	Application rates	____yes___no
c.	Quantities	____yes___no
d.	Waste location	____yes___no

265.280 12. Is a copy of the closure/post-closure plan kept at the facility? ____yes___no
(Effective May 19, 1981)

265.281 13. Are ignitable or reactive wastes placed in the facility? ____yes___no

a. If yes, are the wastes treated, rendered or mixed before or immediately after placement in the landfill so it is no longer reactive or ignitable?

____yes___no

b. Describe or attach a copy of treatment.

14. Are incompatible wastes placed in the facility? ____yes___no

a. Are the incompatible waste placed in different locations in the facility? ____yes___no

Subpart Q

CHEMICAL, PHYSICAL & BIOLOGICAL TREATMENT CHECKLIST

NOTE: Applies to treatment in other than tanks, surface impoundments, and land treatment facilities.

265.401 1. Check treatment process and equipment:

a. Are there any leaks, corrosion or other failures evident? ___yes___no
If yes, describe._____
_____
_____

2. Is the process a continous feed system? ___yes___no

a. If yes, is it equipped with a means to stop waste inflow (e.g. waste feed cut-off system or by-pass)? ___yes___no

264.402 3. Is waste analysis information maintained in the operating record? ___yes___no

4. If a hazardous waste is received which is substantially different from any hazardous waste previously treated at the facility, are the following obtained? ___yes___no

a. Waste analyses and trial treatment tests (eg bench scale)? ___yes___no
b. Written documented information on similar treatment of similar waste? ___yes___no

265.403 5. Does the owner/operator inspect the following, where present? ___yes___no

a. At least daily.
1. Discharge control and safety equipment (eg waste feed cut-off, by-pass, drainage or pressure relief systems)? ___yes___no

2. Data gathered from monitoring equipment (eg pressure and temperature gauges)? ___yes___no

b. At least weekly.
1. Construction materials of treatment process or equipment to detect erosion or obvious signs of leakage? ___yes___no

6. Does the facility maintain a closure plan? ___yes___no
(Effective May 19, 1981)

265.405 7. Are ignitable or reactive wastes placed in the treatment process? ___yes___no

a. If yes, is the waste treated, rendered or mixed before or immediately after being placed in the treatment process so it no longer meets the definition of ignitable or reactive? ___yes___no
Describe or attach a copy of the treatment.

Subpart P

THERMAL TREATMENT CHECKLIST

NOTE: Applies to thermal treatment of hazardous waste in devices other than incinerators.

265.373 1. Is the process a non-continuous (batch) process? ____yes__no

a. If no, is the process operating at steady state conditions (including temperature) before adding hazardous waste? ____yes__no

265.375 b. Is a waste analysis documented in the operating record that includes

1. Heating value ____yes__no
2. Halogen content ____yes__no
3. Sulfur content ____yes__no
4. Concentration of lead ____yes__no
5. Concentration of mercury ____yes__no

NOTE: 4&5 not required if facility has written documented data that show the elements are not present)

265.377 2. Does the owner/operator monitor the following when thermally treating hazardous wastes? ____yes__no

a. At least every 15 minutes, existing instruments which relate to temperature and emission control:

1. Waste feed ____yes__no
2. Auxiliary fuel feed ____yes__no
3. Treatment process temperature ____yes__no
4. Relevant process flow ____yes__no
5. Relevant level controls ____yes__no

b. Stack plume (emissions) at least hourly:

1. Color (normal) ____yes__no
2. Opacity ____yes__no

c. Thermal treatment process equipment at least daily

1. Pumps, valves, conveyors, pipes, etc - for leaks, spills and fugitive emissions? ____yes__no
2. Emergency shutdown controls? ____yes__no
3. System alarms ____yes__no

FACILITY _____

DATE _____

EPA ID NO. _____

RCRA COMPLIANCE INSPECTION REPORT
NARRATIVE EXPLANATIONS

SECTION _____ PART _____

SECTION _____ PART _____

SECTION _____ PART _____

FACILITY _____

DATE _____

EPA ID NO. _____

RCRA COMPLIANCE INSPECTION REPORT
NARRATIVE EXPLANATIONS

SECTION _____ PART _____

SECTION _____ PART _____

SECTION _____ PART _____

SITE PLAN

Photo 9. View of drums of paint sludge and waste trichloroethylene stored in the Bar Joist Shop at Armco Steel. Drums of paint sludge were unmarked.

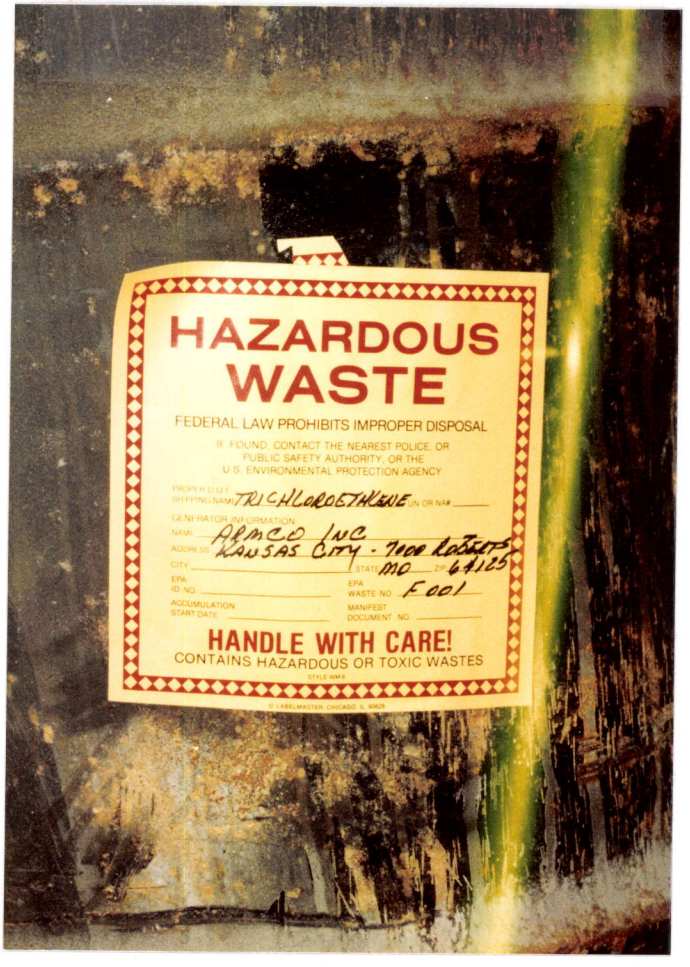


Photo 10. Hazardous waste mark on drum of chlorinated solvent in Bar Joist Shop at Armco Steel.

Armco Steel, Kansas City, Missouri

Photo 11. Cell one of electroplating sludge pond at Armco Steel, Kansas City, MO as seen on 5/12/82. One of the galvenizing plants in background.

Photo 12. Dam between cells one and two of electroplating sludge pond at Armco Steel.

Photo 13. Cell two of electroplating sludge pond at Armco Steel. Discharge from this pond is to City sewer.

Given to — by R.W. Davis, Armco Steel 5-12-82 DAR

Form D NR H.W.G. - 10

HAZARDOUS WASTE MANIFEST DOCUMENT

MISSOURI DEPARTMENT OF NATURAL RESOURCES
P. O. Box 1368, Jefferson City, Missouri 65102 314-751-3241

MANIFEST DOCUMENT NUMBER: 0 1 3 1 0 - 0 0 2 5

Generator I.D. No.	Waste I.D. No.	Shipment No.

Part 1 to be completed by the generator (Instructions for completing and handling this document are on the reverse side)

Name	Identification	Address	Telephone No.	Date Shipped or Rec'd
Item 1. Generator ARMCO INC. EPA #KOD007116029	Generator I.D. No. 01510	7810 Roberts Street Kansas City, MO 64125	816-242-3871	2/24/82
Item 2. Transporter CONSERVATION CHEMICAL COMPANY EPA #MOD006529705 - Kansas City	Transporter No. MoDNR 11-1004	8900 Front Street Kansas City, MO	816-483-4242	2/24/82
Item 3. Treatment, Storage or Disposal Facility CHAIN OF ROCKS - CITY OF ST. LOUIS EPA #MOT 000010774	T.S.D. Facility Permit No. RE10 Applied for	10450 Riverview Dr. St. Louis, MO	314-867-1520	

Item 4.	Proper DOT Shipping Name	DOT Hazard Class	DOT Label Required or Exceptions	Quantity	Units*	Weight (If applicable)
	Waste Sulfuric Acid, Spent BO	Corrosive Material	Bulk Shipment	22	1 2 3 4 5	44,000

*Circle one: 1. tons; 2. gallons; 3. cubic yds; 4. drums - 55 gallon; or 5. Pounds

Item 5.

Immediate Emergency Response Information	24-hour emergency telephone numbers
Korpan Rejected In the event of a spill, contact the National Response Center, U. S. Coast Guard, 800-424-8802	816-561-7330 Chemtrec 800-424-9300
SPECIAL HANDLING INSTRUCTIONS	

Item 6.

Placards Provided or Affixed	
X Corrosive	
UN 1830	

Shipper's Check List

X	DOT Labels Applied and Secure	X	DOT Auth. Containers
X	Proper DOT Name on all Packages	X	Checked for Proper Sealing
	Air Cargo Only		Peligro Label Applied

Item 7. GENERATOR CERTIFICATION. This is to certify that the above materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable rules and regulations of the United States Department of Transportation and the Missouri Department of Natural Resources.

Generator's Signature [signature] Date 2/24/82

Part 2

To be completed by the transporter

Item 8. TRANSPORTER CERTIFICATION. This is to certify acceptance of the hazardous waste shipment. Date accepted for Shipment:

Transporter's Signature [signature] Date 2-24-82

Part 3

Item 9. TSDF CERTIFICATION. This is to certify acceptance of the hazardous waste for treatment, storage or disposal.

TSDF Signature [signature] Date 2-24-82

INSTRUCTIONS FOR COMPLETING THE HAZARDOUS WASTE MANIFEST DOCUMENT (FORM H.W.G.-10)

(Please Print in Black Ink or Typewrite)

1. To Be Completed by the Generator.

Manifest Document Number

(a) Generator I.D. Number - Enter the five (5) digit number which you were assigned by the department at the time you initially registered.

(b) Enter the waste number which you assigned to this specific waste at the time you registered this waste with the department.

Enter the shipment number which is a three (3) digit number starting with 001 and increases one (1) digit for each consecutive shipment which your company makes.

Item 1. Enter the generator's name, five (5) digit identification number assigned by the department, complete mailing address, telephone number, and the date shipped in the appropriate spaces provided.

Item 2. The generator shall enter the transporter's name, the license number assigned to the transportation firm by the department, the transporter's complete address, telephone number, and the date the transporter accepted the waste for shipment.

Item 3. The generator shall enter the name of the waste facility, the identification code of the facility assigned by the department, the facility's complete mailing address, telephone number, and the date the waste will be received at the hazardous waste management facility.

Item 4. In Column 1 under DOT shipping name, enter the U.S. DOT proper shipping name if the hazardous waste is a U.S. DOT hazardous material. If the hazardous waste is not a U.S. DOT hazardous material, use the department description found in Chapter 4. In Column 2 enter the U.S. DOT Hazardous Class (e.g. flammable liquid). In Column 3 enter the container labels required of the U.S. DOT exception. If the hazardous waste is not classified as a hazardous material by the U.S. DOT then enter Not Applicable in Columns 2 and 3. In Column 4 enter the quantity (e.g. 80). In Column 5 circle one of the digits which corresponds to the appropriate units of measure directly below Item 4. In Column 6 enter the total weight if the units in Column 5 are not appropriate.

Item 5. Enter Instructions in regards to precautions which should be taken when loading, transporting and unloading of wastes. Under 24-hour emergency telephone number, enter the name and number of the key person in the generator's company who can provide emergency response information.

Item 6. This item allows the generator to enter the placards provided to the transporter or affixed to his own vehicle.

Item 7. An authorized person employed by the generator shall sign the certification and enter the date.

2. To Be Completed by the Transporter

Item 8. The Transporter shall sign the certification and enter the date.

3. To Be Completed by the Hazardous Waste Facility

Item 9. The operator of the hazardous waste facility shall sign the certification and enter the date.

INSTRUCTIONS FOR HANDLING THE MANIFEST DOCUMENT

1. The "generator" shall complete Part I of the manifest document and obtain the signature of the "driver" on Part II of the manifest document. The generator then shall retain a copy for his records.

2. After the truck driver signs the manifest document he carries the document with him to the final destination of the waste and obtains the signature of the storage, treatment, disposal, recovery, or reclamation facility operator. The transporter then keeps the pink copy of the manifest for his file.

3. The storage, treatment, disposal, recovery or reclamation facility operator keeps the canary copy for his files and forwards the green copy and the original to the generator within 15 days of the original shipping date.

4. The generator files the green copy and forwards the original to all succeeding manifest documents to the department on a quarterly basis.

*[If the mode of transportation is by mode other than motor vehicle, the generator can treat the manifest document as described above or the generator can provide the manifest information to the transporter specifying that the waste is subject to the Missouri Hazardous Waste Management Law. The generator will then file the goldenrod copy for his records and forward the remaining 3 copies and the original to the hazardous waste management facility operator.]

Form D NR H.W.G. - 10
HAZARDOUS WASTE MANIFEST DOCUMENT
SOURI DEPARTMENT OF NATURAL RESOURCES
P. O. Box 1368, Jefferson City, Missouri 65102

314–751-3241

MANIFEST DOCUMENT NUMBER

0	1	5	1	0	[redacted]	0	0	2

Generator I.D. No. | Waste I.D. No. | Shipment No.

: 1 to be completed by the generator (Instructions for completing and handling this document are on the reverse side)

	Identification	Address	Telephone No.	Date Shipped or Rec'd.
ne ANMUL INC.				
n 1. Generator [illegible] ANMUL INC [illegible] MOD 116029	Generator I.D. No. 01510	7000 ROBERTS STREET KANSAS CITY MO. [illegible]	816-242-58[illegible]	1-15-82
n 2. Transporter SOLVENT RECOVERY CORP EPA MO D000610766	Transporter No. H 1091	716 MULBERRY Kansas City, Mo. 64101	816-471-1391	1-19-82
n 3. Treatment, Storage or Disposal Facility SOLVENT RECOVERY CORP	T,S,D, Facility Permit No. RP-19	716 MULBERRY K.C. MO. 64101	471-1569	1-19-82

n 4.	Proper DOT Shipping Name	DOT Hazard Class	DOT Label Required or Exceptions	Quantity	Units*	Weight (If applicable)
	Flammable liquid - NOS	Flammable	Flammable	10	1 2 3 4 5	

*Circle one: 1. tons; 2. gallons; 3. cubic yds; 4. drums 55 gallon; or 5. Pounds

n 5.

Immediate Emergency Response Information	24-hour emergency telephone numbers
NOT REQUIRED In the event of a spill, contact the National Response Center, U. S. Coast Guard, 800-424-8802	R.W. DAVIS 816-242-5498 Chemtrec 800-424-9300
SPECIAL HANDLING INSTRUCTIONS: NOT REQUIRED	

Item 6.

Placards Provided or Affixed	
Flam. Liq.	

Shipper's Check List			
✓	DOT Labels Applied and Secure	✓	DOT Auth. Containers
✓	Proper DOT Name on all Packages	✓	Checked for Proper Sealing
	Air Cargo Only		Peligro Label Applied

n 7. GENERATOR CERTIFICATION. This is to certify that the above materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable rules and regulations of the United States Department of Transportation and the Missouri Department of Natural Resources.

erator's Signature [signature] Date 1-19-82

SOLVENT RECOVERY CORP.

: 2
be completed by the transporter

n 8. TRANSPORTER CERTIFICATION. This is to certify acceptance of the hazardous waste shipment. Date accepted for Shipment: JAN 19 1982

nsporter's Signature [signature] Date 1-19-82

THIS SHIPMENT RECEIVED SUBJECT TO APPROVAL WHEN OPENED
By [signature]

: 3
n 9. TSDF CERTIFICATION. This is to certify acceptance of the hazardous waste for treatment, storage or disposal.

DF Signature [signature] Date 1-[illegible]-82

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION VII
324 EAST 11TH STREET
KANSAS CITY, MISSOURI 64106

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
ENVIRONMENTAL PROTECTION AGENCY
EPA-335